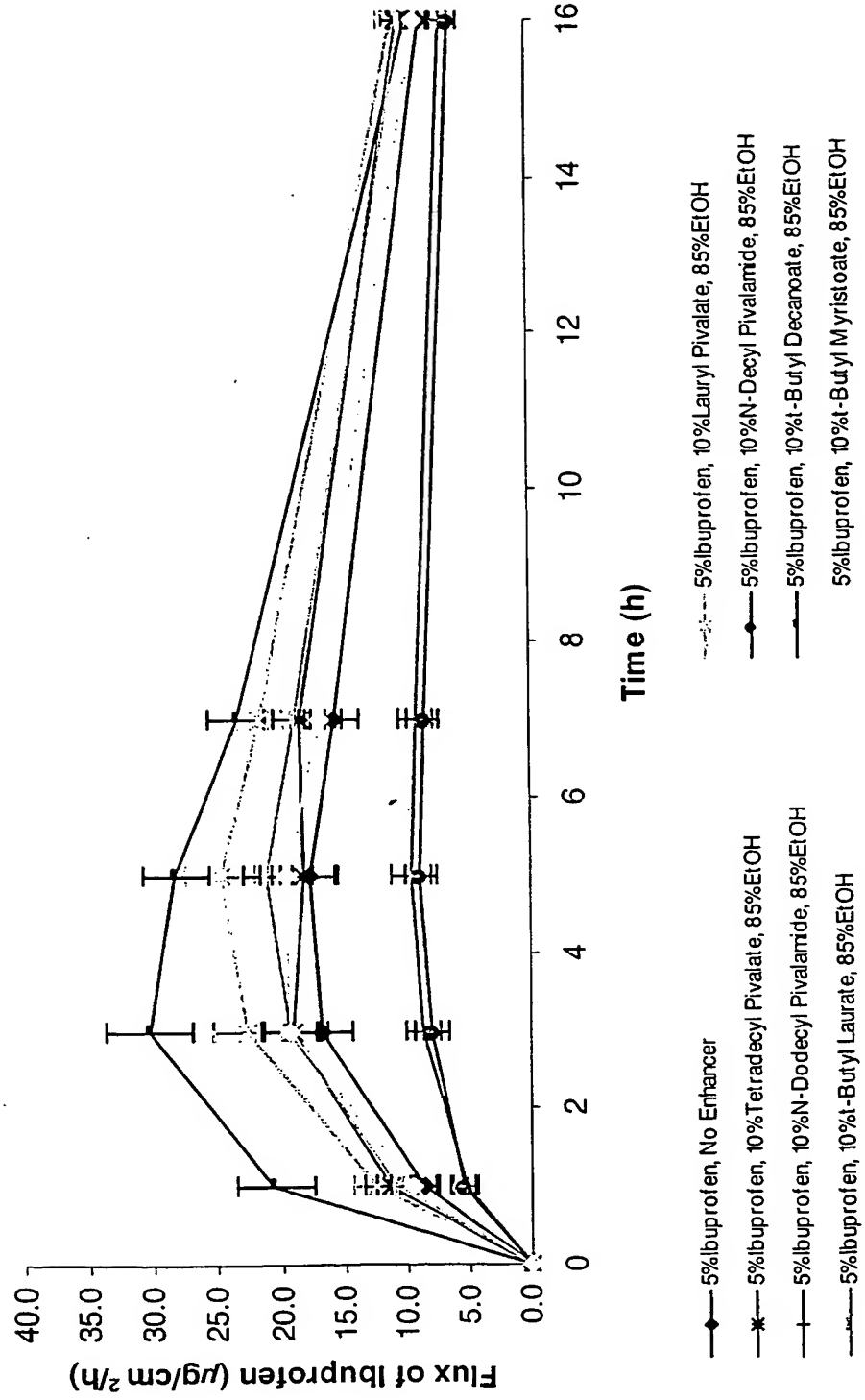
Figure 1


Mean ± S.E. (n=12)
Flux of Ibuprofen (μg/cm²/h)
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
0
2
4
6
8
10
12
14
16
Time (h)
5%Ibuprofen, No Enhancer
5%Ibuprofen, 10%Tetradecyl Pivalate, 85%EtOH
5%Ibuprofen, 10%N-Dodecyl Pivalamide, 85%EtOH
5%Ibuprofen, 10%t-Butyl Laurate, 85%EtOH
5%Ibuprofen, 10%Lauryl Pivalate, 85%EtOH
5%Ibuprofen, 10%N-Decyl Pivalamide, 85%EtOH
5%Ibuprofen, 10%t-Butyl Decanoate, 85%EtOH
5%Ibuprofen, 10%t-Butyl Myristoate, 85%EtOH

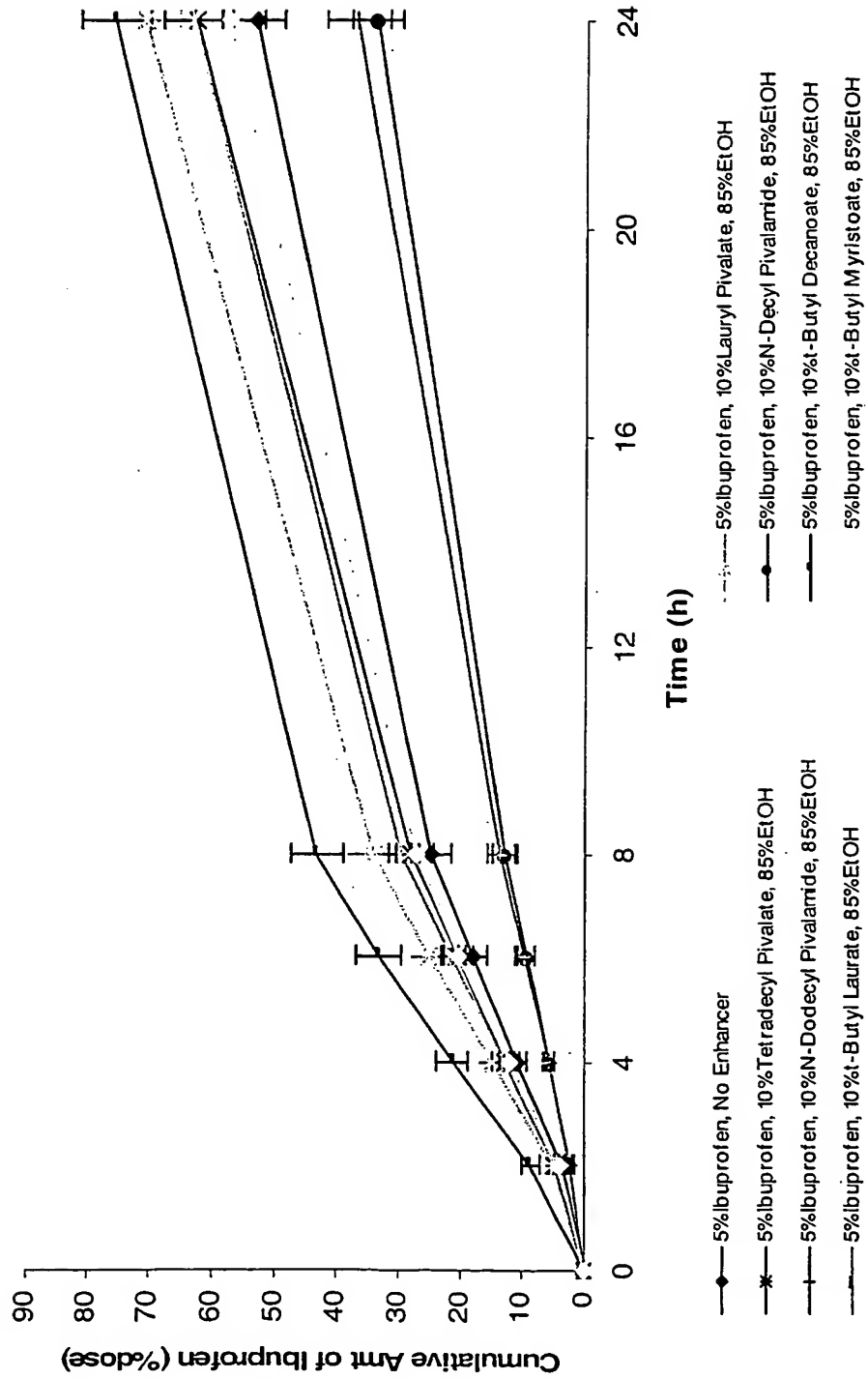
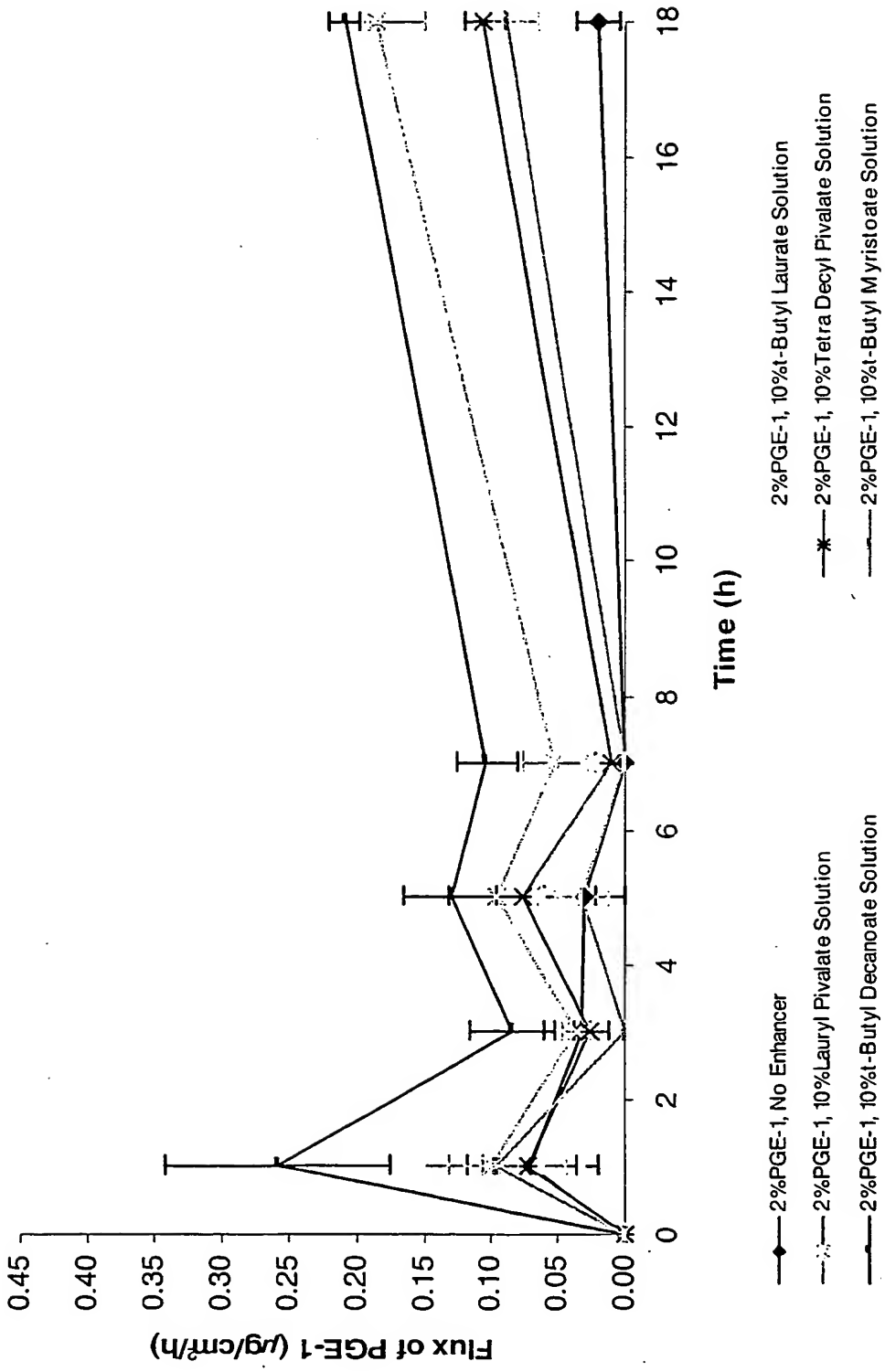

Mean ± S.E. (n=12)
Cumulative Amt of Ibuprofen (%dose)
0
10
20
30
40
50
60
70
80
90
0
4
8
12
16
20
24
Time (h)
5%Ibuprofen, No Enhancer
5%Ibuprofen, 10%Tetradecyl Pivalate, 85%EtOH
5%Ibuprofen, 10%N-Dodecyl Pivalamide, 85%EtOH
5%Ibuprofen, 10%t-Butyl Laurate, 85%EtOH
5%Ibuprofen, 10%Lauryl Pivalate, 85%EtOH
5%Ibuprofen, 10%N-Decyl Pivalamide, 85%EtOH
5%Ibuprofen, 10%t-Butyl Decanoate, 85%EtOH
5%Ibuprofen, 10%t-Butyl Myristoate, 85%EtOH

Figure 2

Figure 3


Mean ± S.E (n=6)
Flux of PGE-1 (µg/cm²/h)
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
2
4
6
8
10
12
14
16
18
Time (h)
2%PGE-1, No Enhancer
2%PGE-1, 10%Lauryl Pivalate Solution
2%PGE-1, 10%t-Butyl Decanoate Solution
2%PGE-1, 10%t-Butyl Laurate Solution
2%PGE-1, 10%Tetra Decyl Pivalate Solution
2%PGE-1, 10%t-Butyl Myristoate Solution

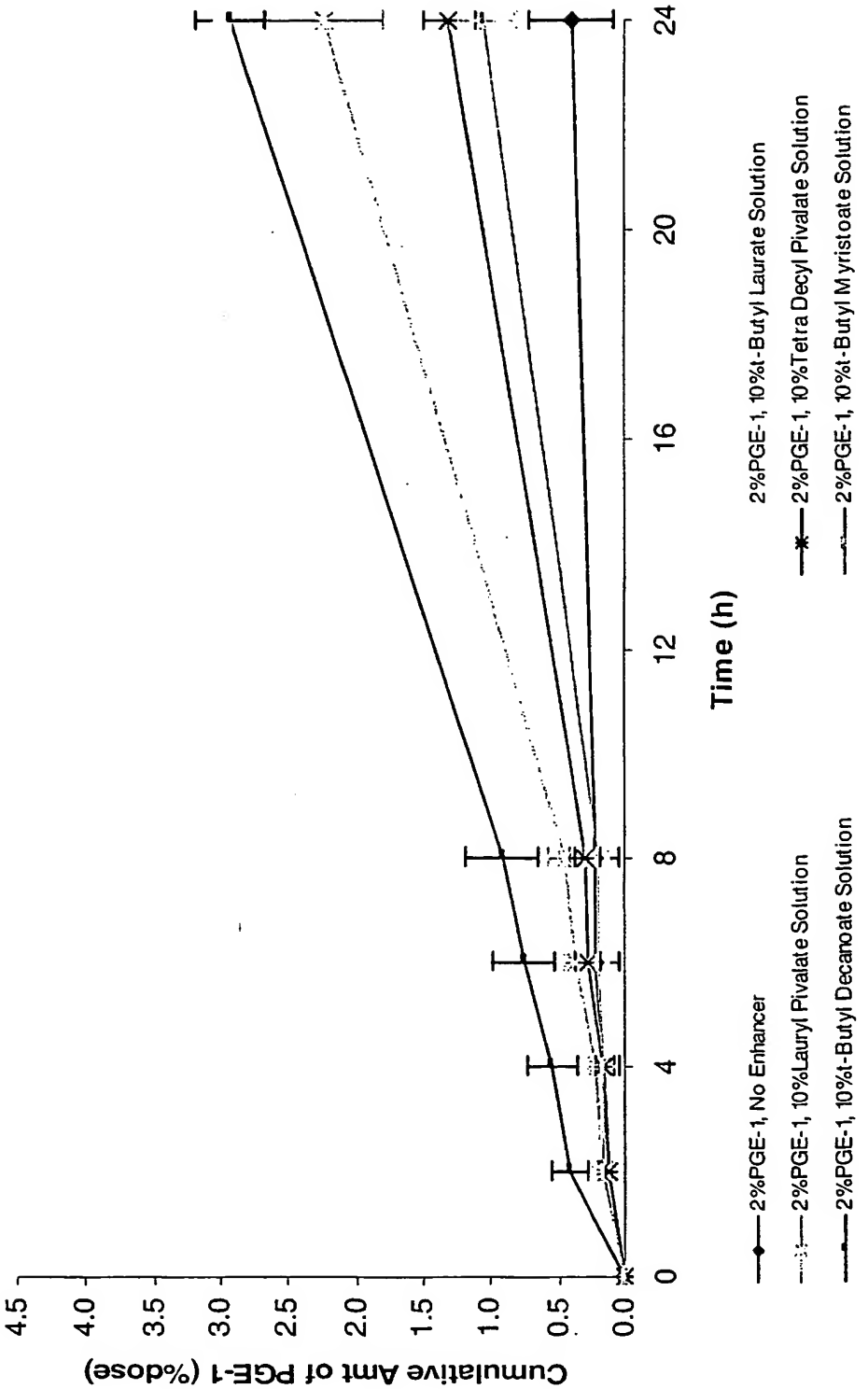

Mean ± S.E (n=6)
Cumulative Amt of PGE-1 (%dose)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
0
4
8
12
16
20
24
Time (h)
2%PGE-1, No Enhancer
2%PGE-1, 10%Lauryl Pivalate Solution
2%PGE-1, 10%t-Butyl Decanoate Solution
2%PGE-1, 10%t-Butyl Laurate Solution
2%PGE-1, 10%Tetra Decyl Pivalate Solution
2%PGE-1, 10%t-Butyl Myristoate Solution

Figure 4

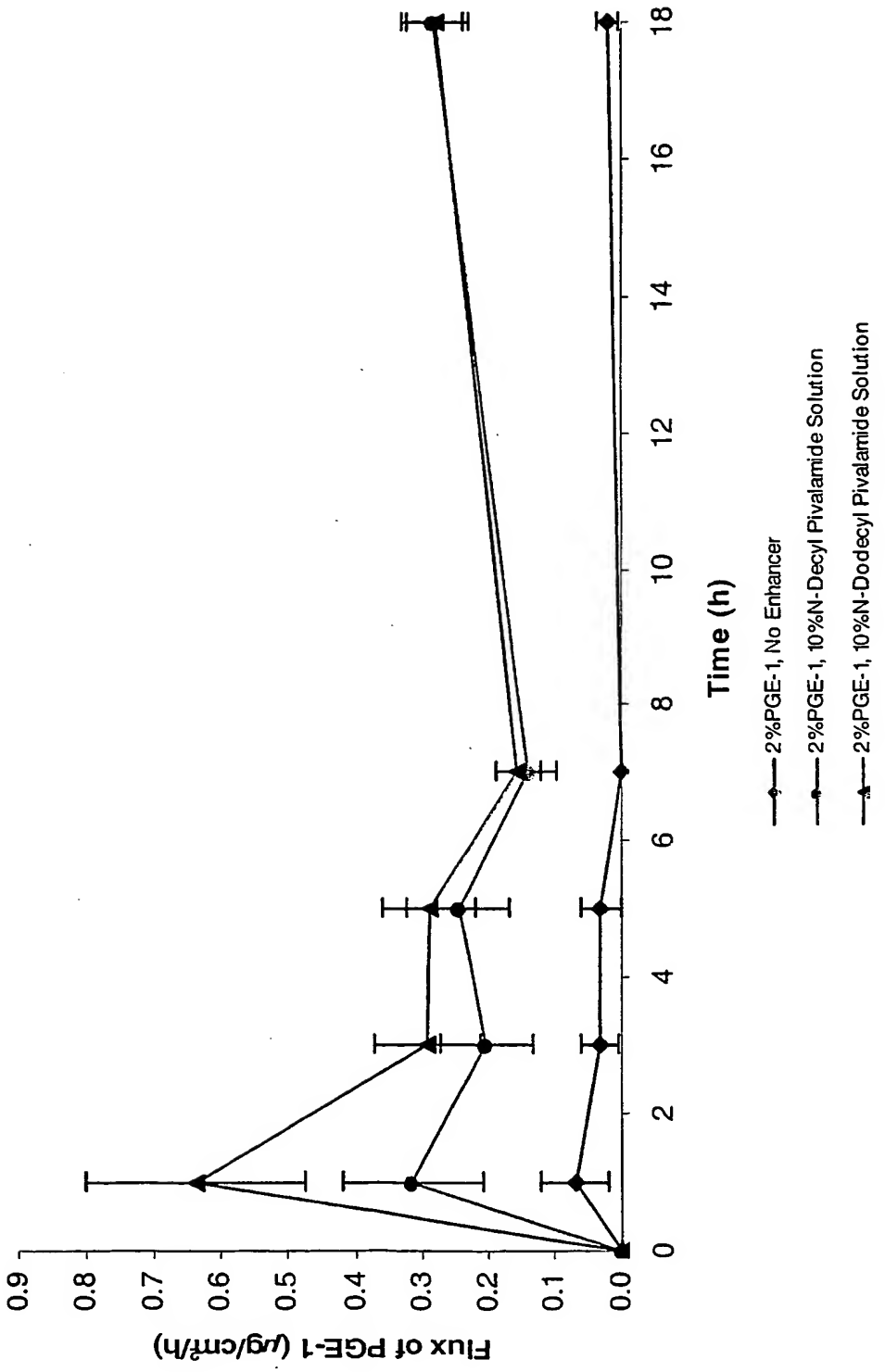

Mean ± S.E (n=6)
Flux of PGE-1 (μg/cm²/h)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
0
2
4
6
8
10
12
14
16
18
Time (h)
2%PGE-1, No Enhancer
2%PGE-1, 10%N-Decyl Pivalamide Solution
2%PGE-1, 10%N-Dodecyl Pivalamide Solution

Figure 5

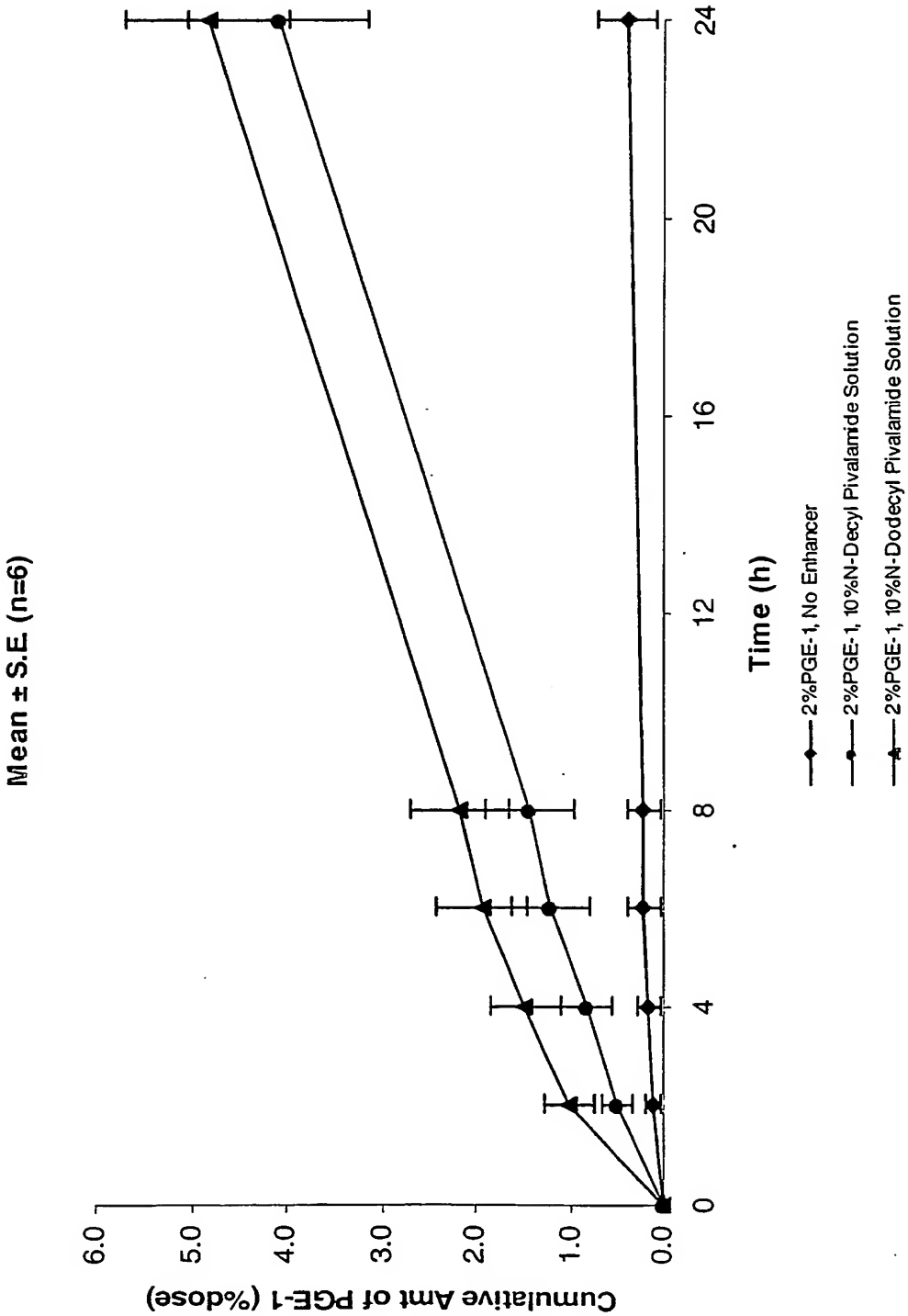

Mean ± S.E (n=6)
Cumulative Amt of PGE-1 (%dose)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0
4
8
12
16
20
24
Time (h)
2%PGE-1, No Enhancer
2%PGE-1, 10%N-Decyl Pivalamide Solution
2%PGE-1, 10%N-Dodecyl Pivalamide Solution

Figure 6

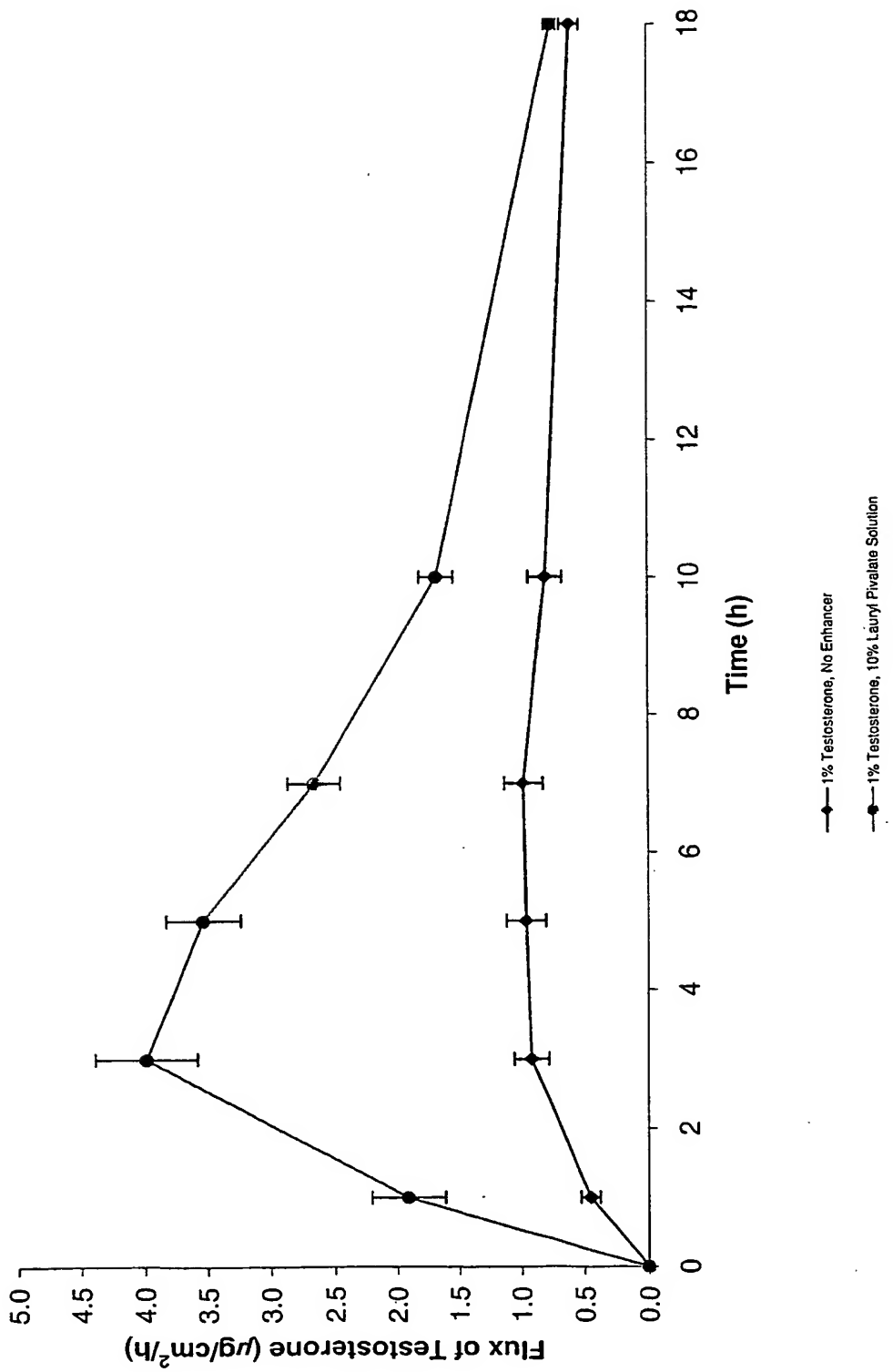

Mean ± S.E. (n=28)
Flux of Testosterone (μg/cm²/h)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
2
4
6
8
10
12
14
16
18
Time (h)
1% Testosterone, No Enhancer
1% Testosterone, 10% Lauryl Pivalate Solution

Figure 7

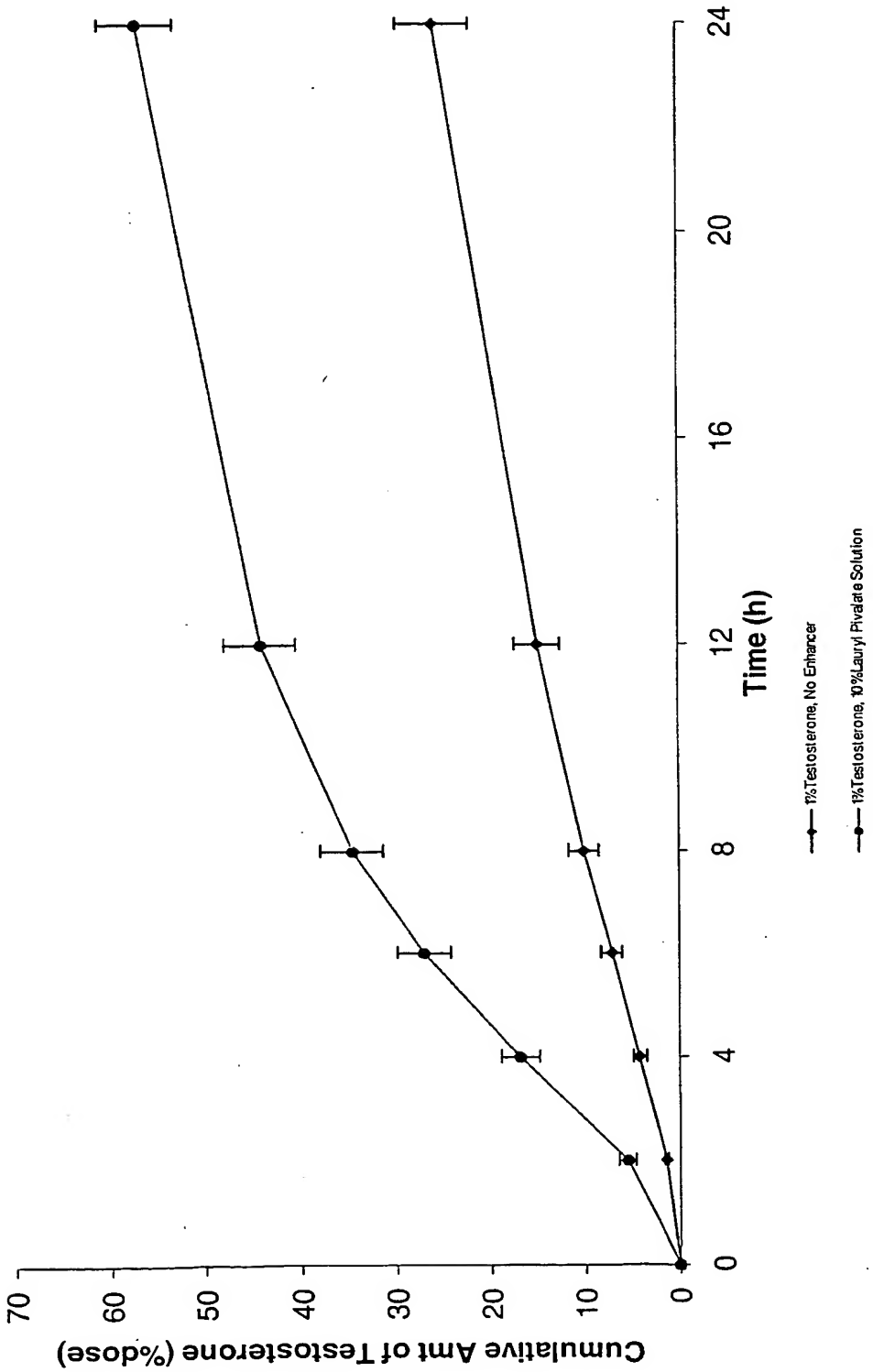

Mean ± S.E. (n=28)
Cumulative Amt of Testosterone (%dose)
0
10
20
30
40
50
60
70
0
4
8
12
16
20
24
Time (h)
1%Testosterone, No Enhancer
1%Testosterone, 10%Lauryl Pivalate Solution

Figure 8

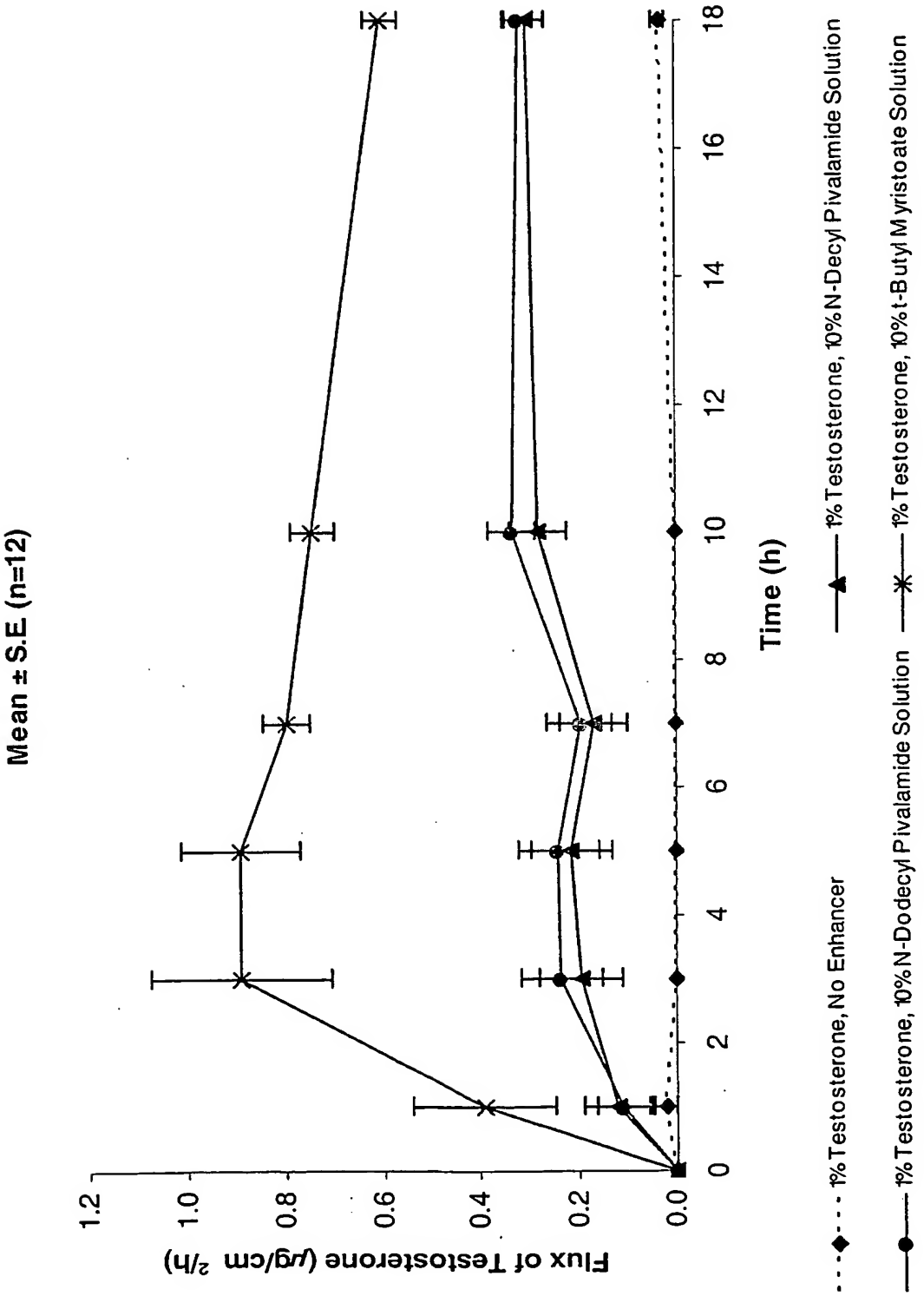
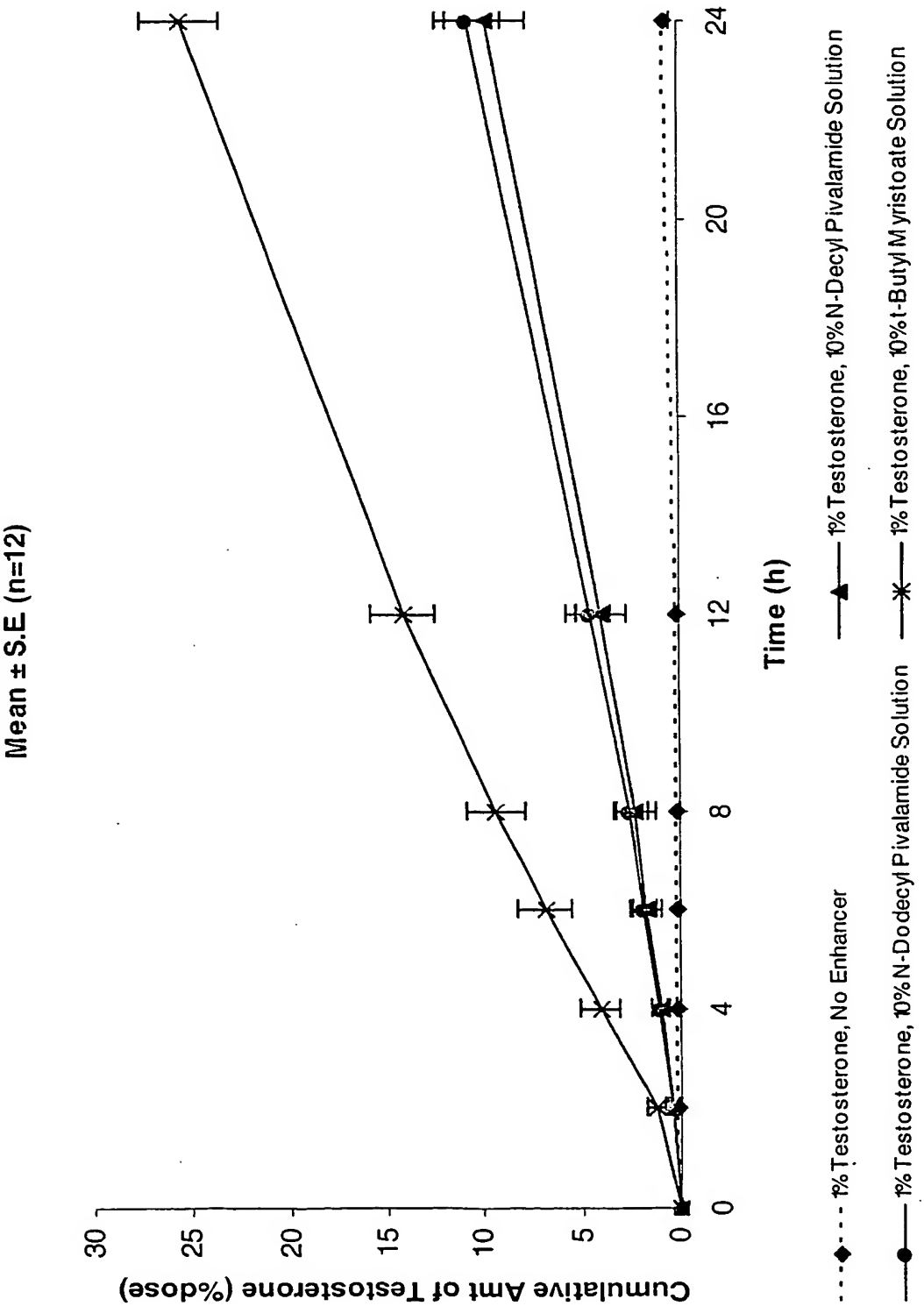

Mean ± S.E (n=12)
Flux of Testosterone (μg/cm 2/h)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
2
4
6
8
10
12
14
16
18
Time (h)
1% Testosterone, No Enhancer
1% Testosterone, 10% N-Decyl Pivalamide Solution
1% Testosterone, 10% N-Dodecyl Pivalamide Solution
1% Testosterone, 10% t-Butyl Myristoate Solution

Figure 9

Figure 10


Mean ± S.E (n=12)
Cumulative Amt of Testosterone (%dose)
0
5
10
15
20
25
30
0
4
8
12
16
20
24
Time (h)
1% Testosterone, No Enhancer
1% Testosterone, 10% N-Decyl Pivalamide Solution
1% Testosterone, 10% N-Dodecyl Pivalamide Solution
1% Testosterone, 10% t-Butyl Myristoate Solution

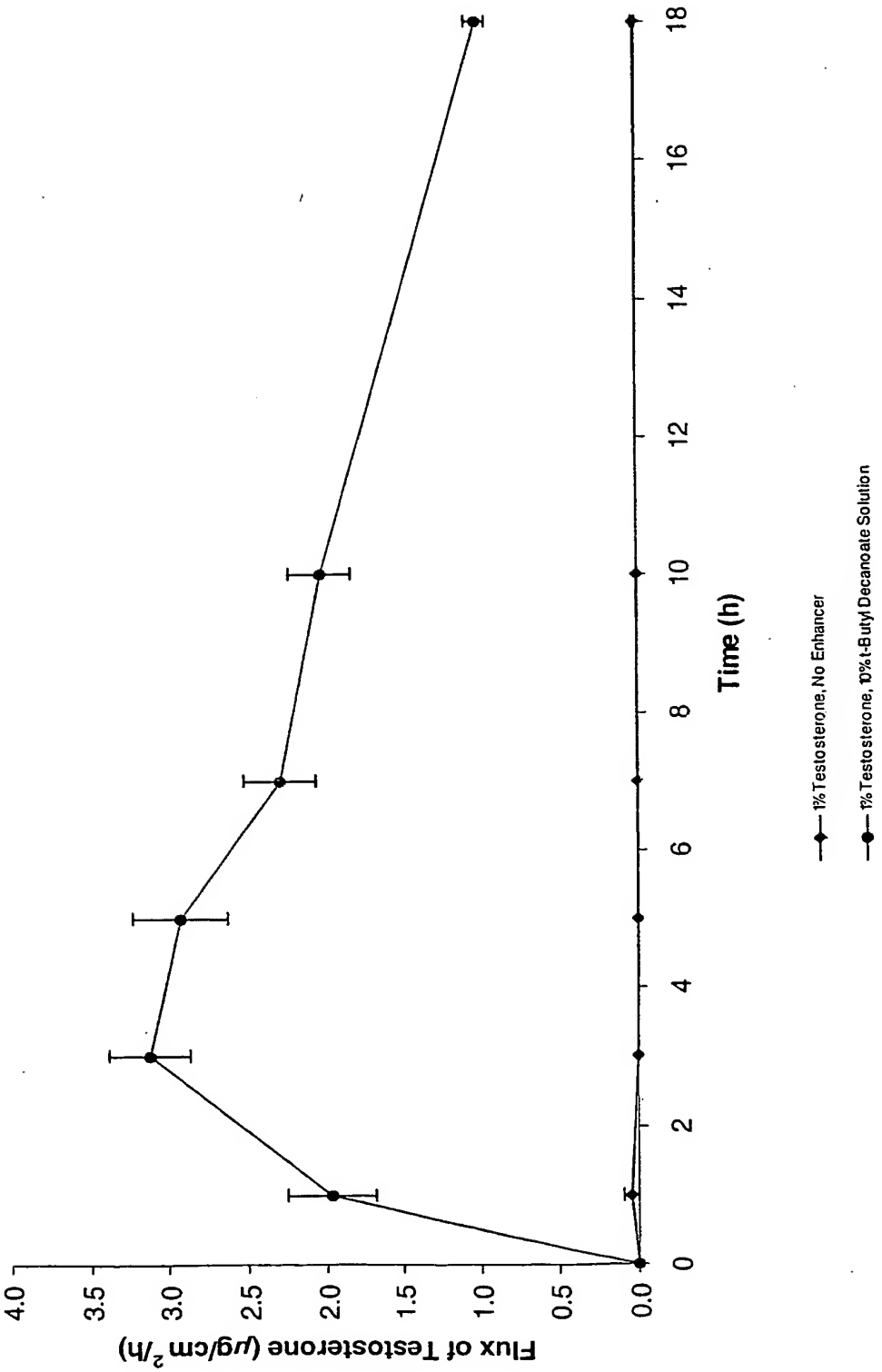

Mean ± S.E. (n=6)
Flux of Testosterone (μg/cm²/h)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
2
4
6
8
10
12
14
16
18
Time (h)
1% Testosterone, No Enhancer
1% Testosterone, 10% t-Butyl Decanoate Solution

Figure 11

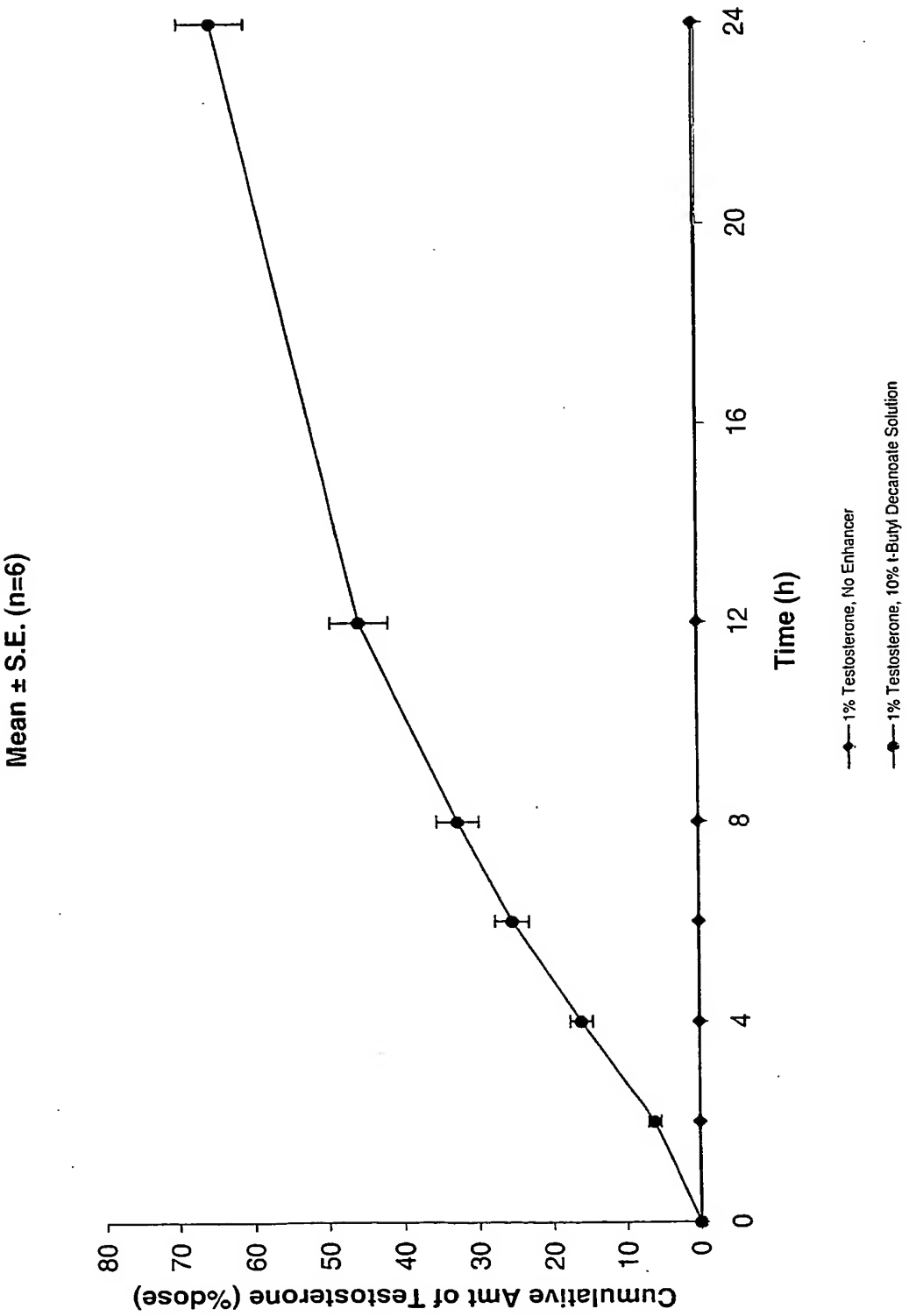

Mean ± S.E. (n=6)
Cumulative Amt of Testosterone (%dose)
0
10
20
30
40
50
60
70
80
0
4
8
12
16
20
24
Time (h)
1% Testosterone, No Enhancer
1% Testosterone, 10% t-Butyl Decanoate Solution

Figure 12

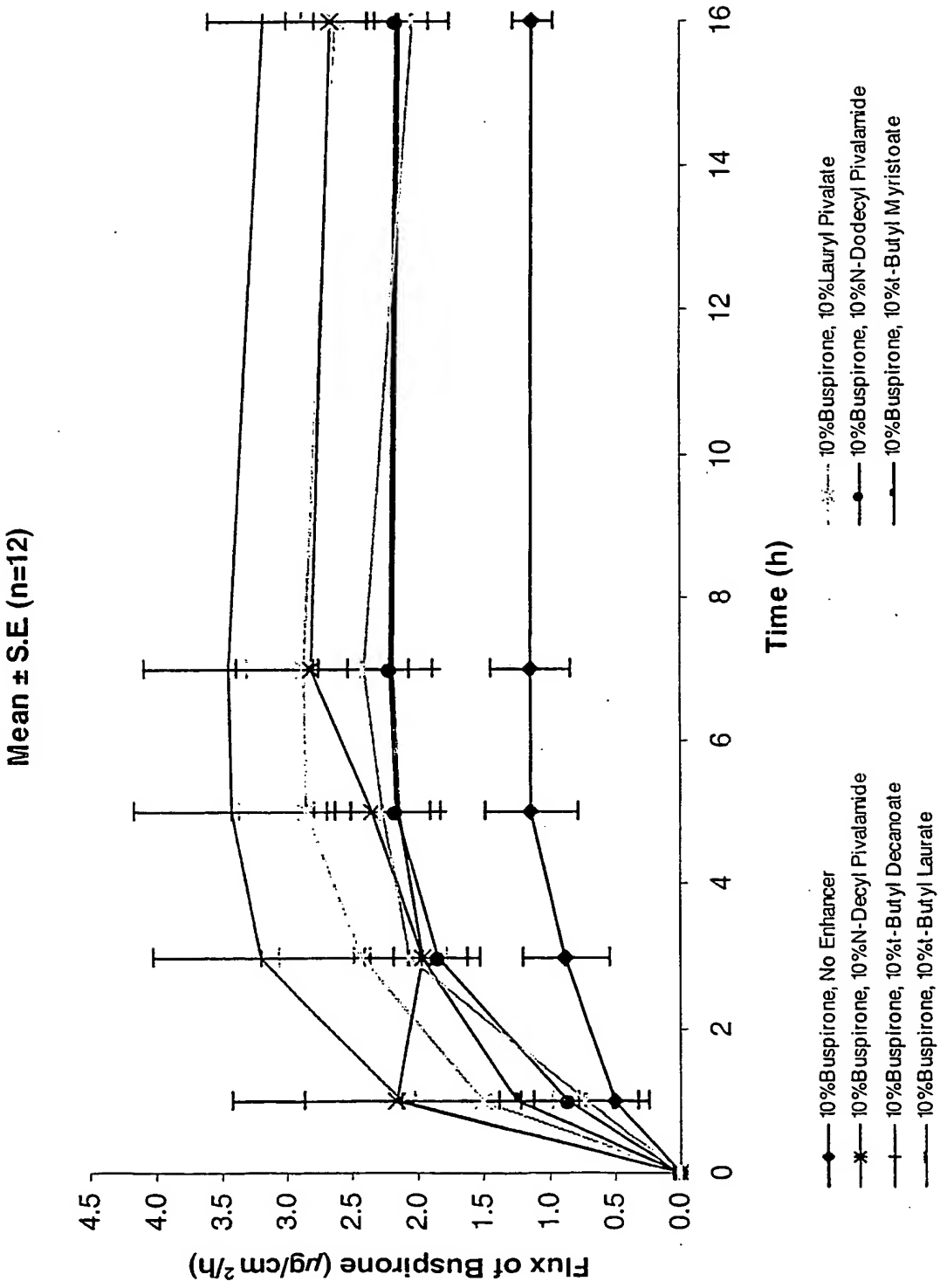

Mean ± S.E (n=12)
Flux of Buspirone (μg/cm²/h)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
2
4
6
8
10
12
14
16
Time (h)
10%Buspirone, No Enhancer
10%Buspirone, 10%N-Decyl Pivalamide
10%Buspirone, 10%t-Butyl Decanoate
10%Buspirone, 10%t-Butyl Laurate
10%Buspirone, 10%Lauryl Pivalate
10%Buspirone, 10%N-Dodecyl Pivalamide
10%Buspirone, 10%t-Butyl Myristoate

Figure 13

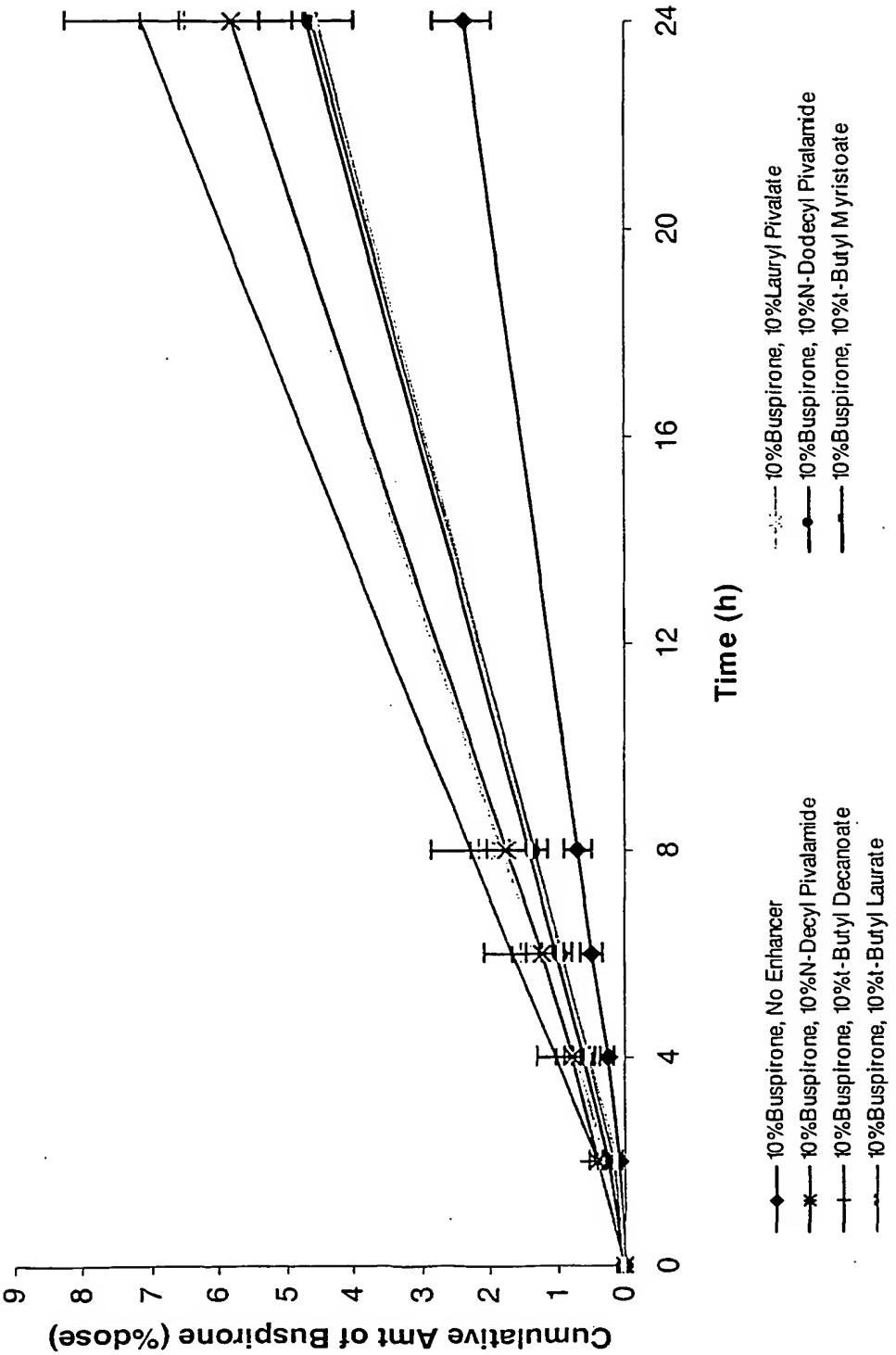

Mean ± S.E (n=12)
Cumulative Amt of Buspirone (%dose)
Time (h)
0
1
2
3
4
5
6
7
8
9
0
4
8
12
16
20
24
10%Buspirone, No Enhancer
10%Buspirone, 10%N-Decyl Pivalamide
10%Buspirone, 10%t-Butyl Decanoate
10%Buspirone, 10%t-Butyl Laurate
10%Buspirone, 10%Lauryl Pivalate
10%Buspirone, 10%N-Dodecyl Pivalamide
10%Buspirone, 10%t-Butyl Myristoate

Figure 14

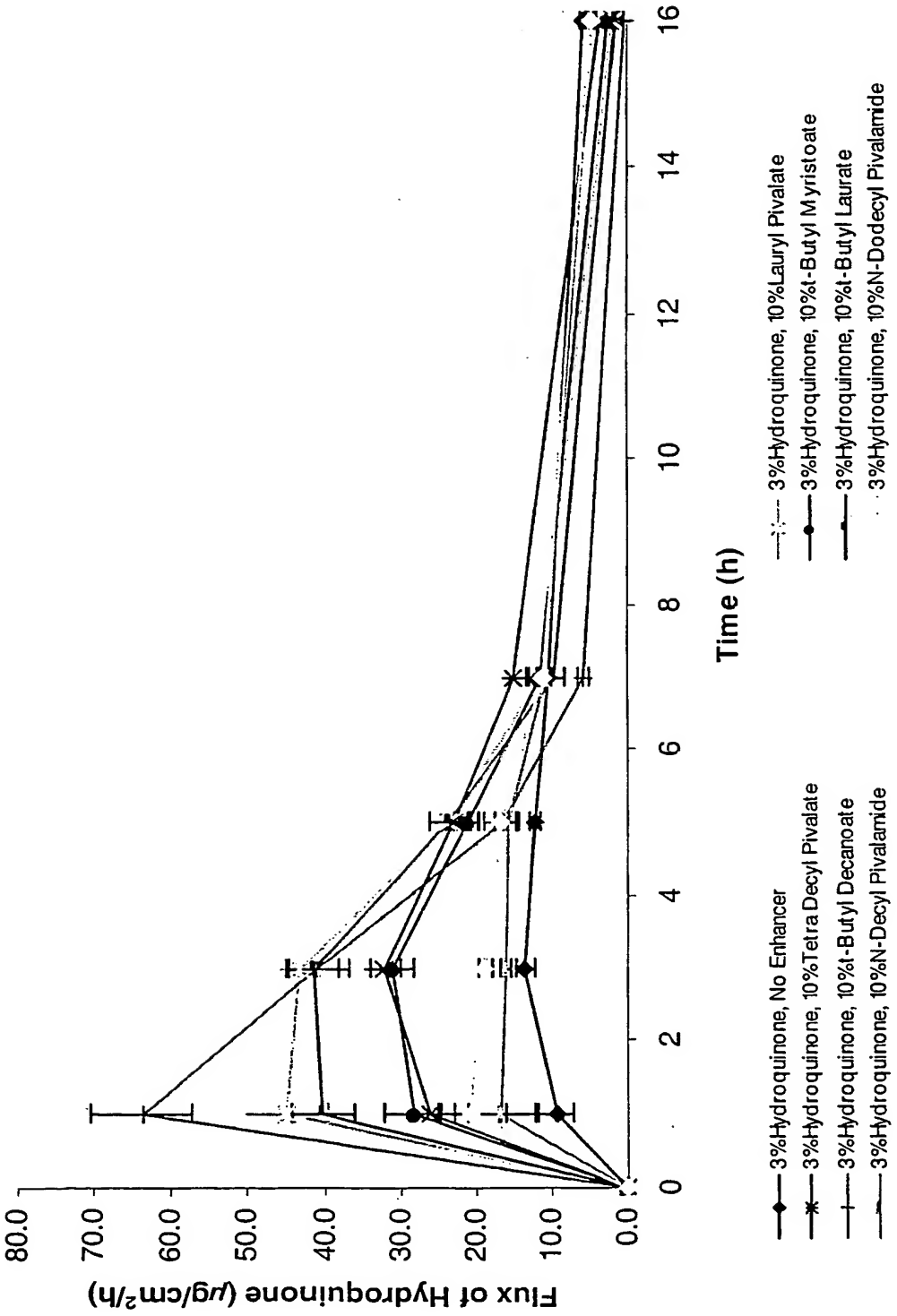

Mean ± S.E (n=12)
Flux of Hydroquinone (μg/cm²/h)
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
2
4
6
8
10
12
14
16
Time (h)
3%Hydroquinone, No Enhancer
3%Hydroquinone, 10%Tetra Decyl Pivalate
3%Hydroquinone, 10%t-Butyl Decanoate
3%Hydroquinone, 10%N-Decyl Pivalamide
3%Hydroquinone, 10%Lauryl Pivalate
3%Hydroquinone, 10%t-Butyl Myristoate
3%Hydroquinone, 10%t-Butyl Laurate
3%Hydroquinone, 10%N-Dodecyl Pivalamide

Figure 15

Figure 16

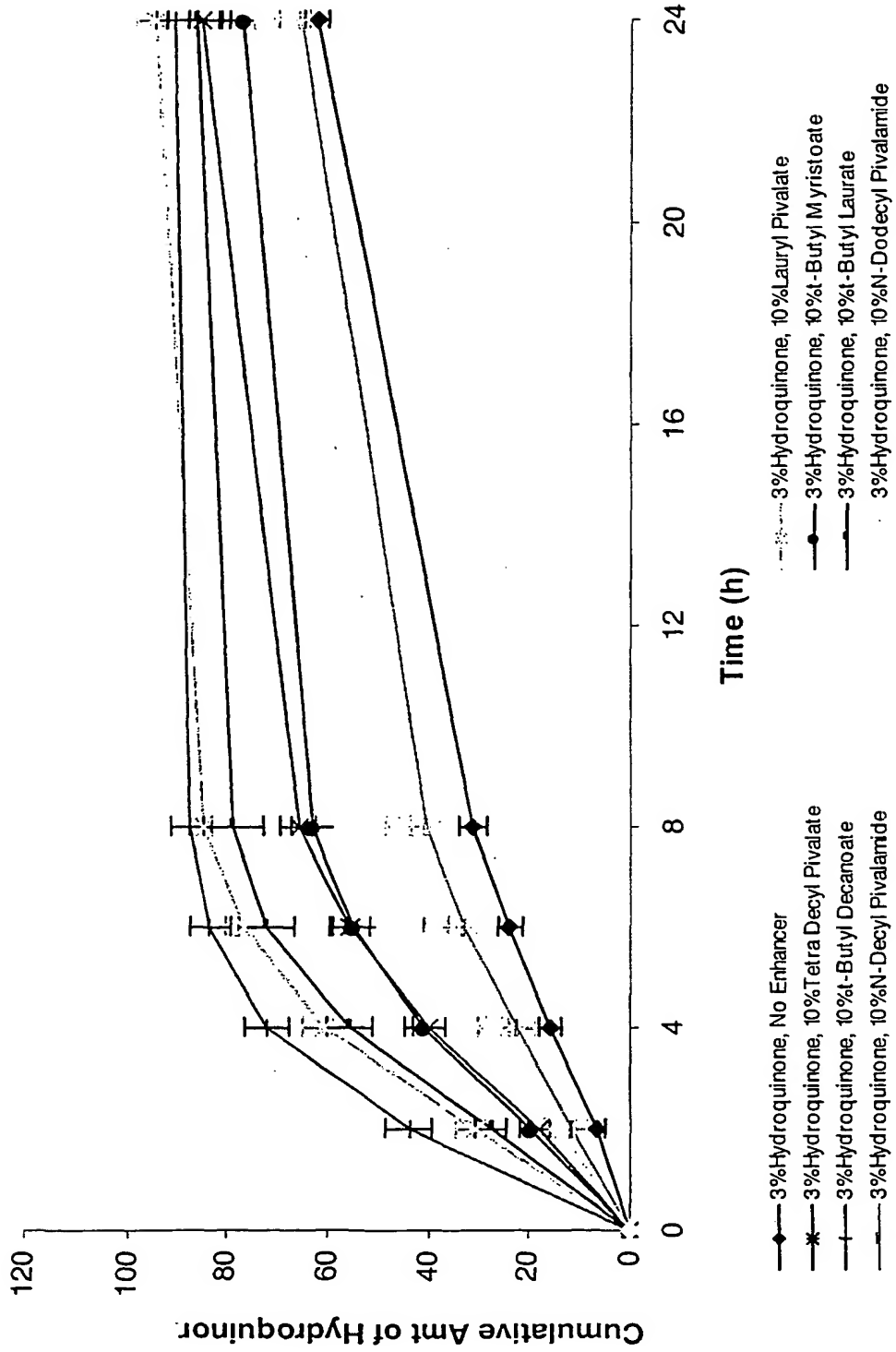

Mean ± S.E. (n=12)
Cumulative Amt of Hydroquinor
120
100
80
60
40
20
0
0
4
8
12
16
20
24
Time (h)
3%Hydroquinone, No Enhancer
3%Hydroquinone, 10%Tetra Decyl Pivalate
3%Hydroquinone, 10%t-Butyl Decanoate
3%Hydroquinone, 10%N-Decyl Pivalamide
3%Hydroquinone, 10%Lauryl Pivalate
3%Hydroquinone, 10%t-Butyl Myristoate
3%Hydroquinone, 10%t-Butyl Laurate
3%Hydroquinone, 10%N-Dodecyl Pivalamide

Figure 17

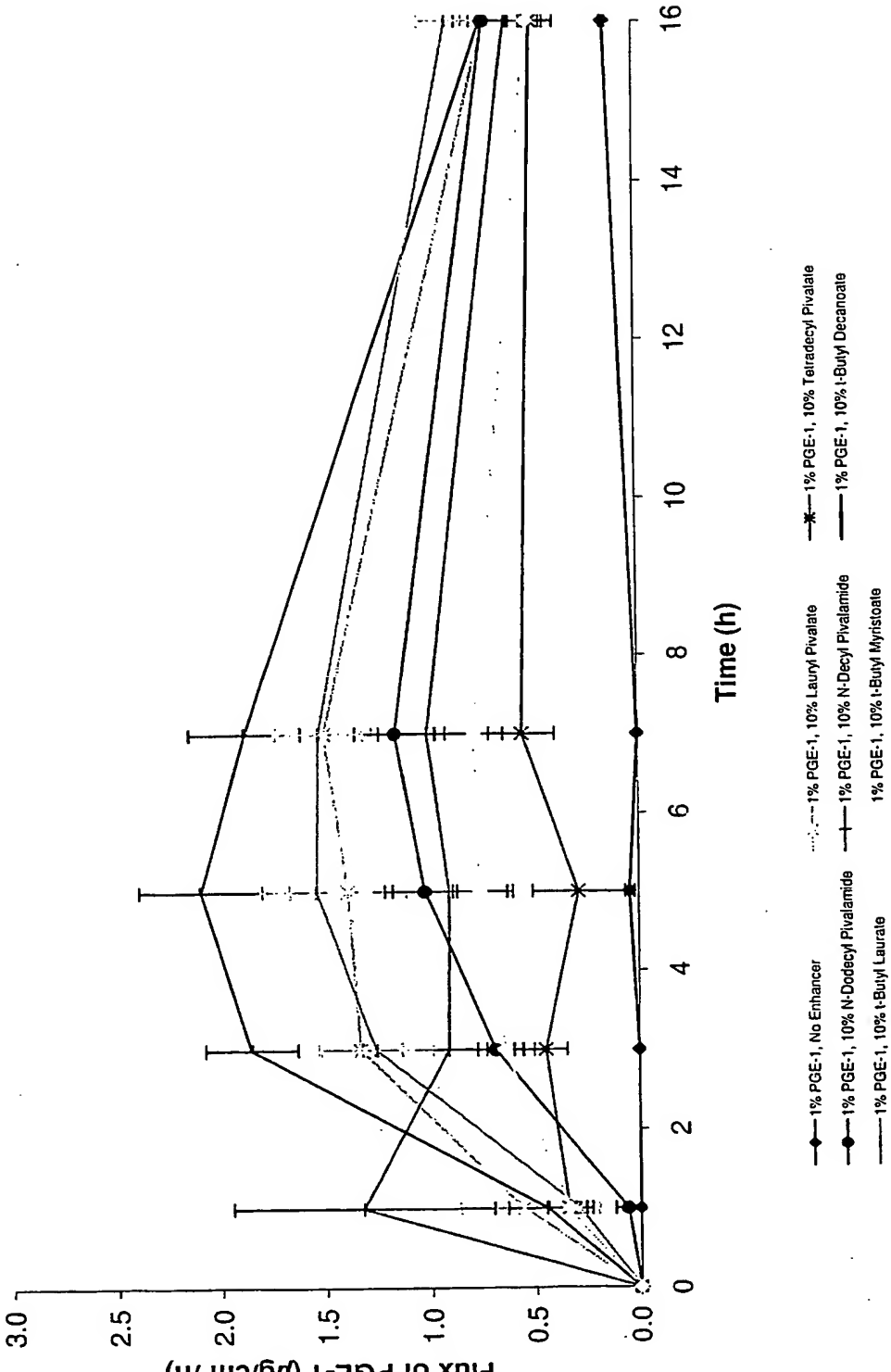
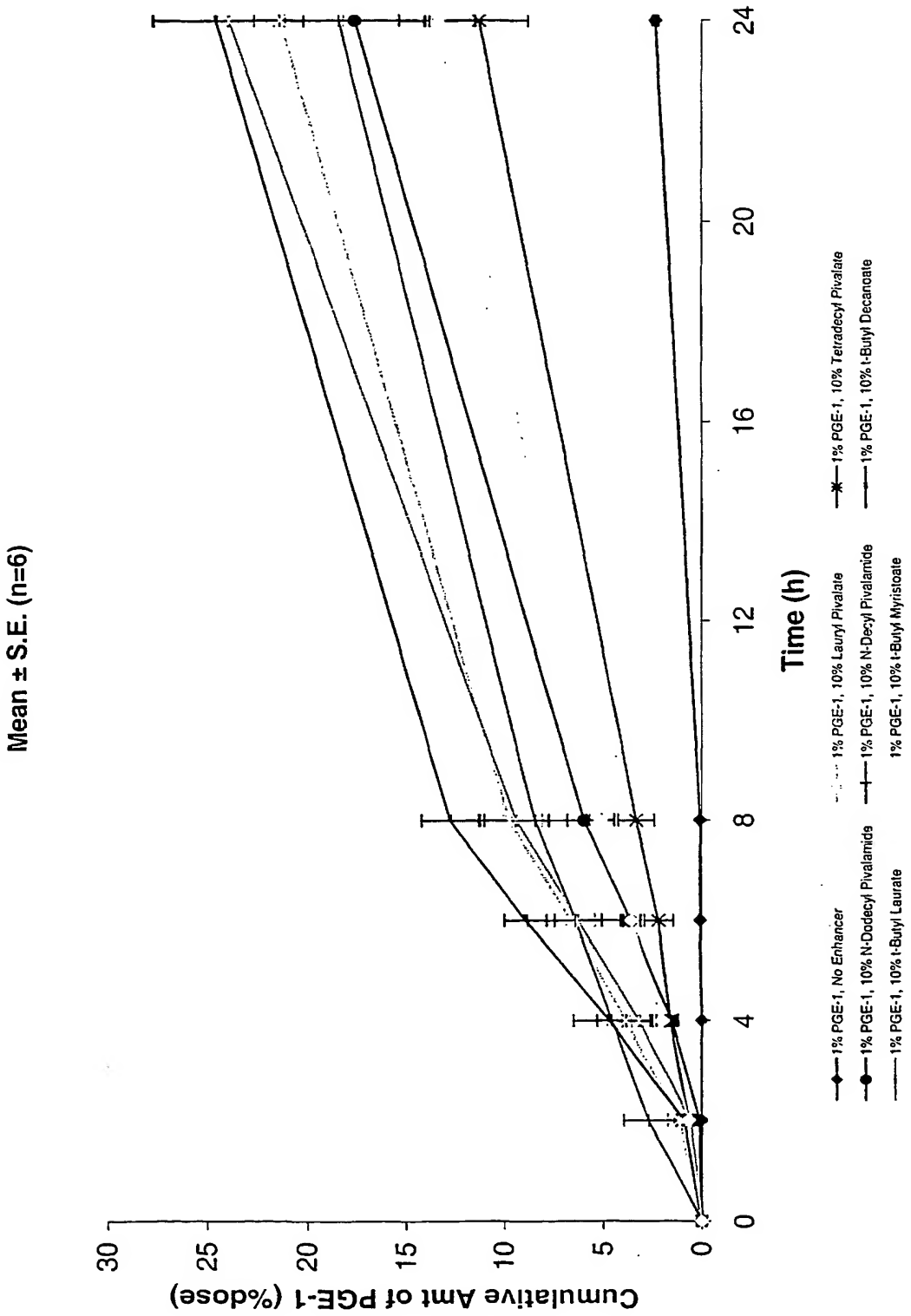

Mean ± S.E. (n=6)
Flux of PGE-1 (μg/cm²/h)
Time (h)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
2
4
6
8
10
12
14
16
1% PGE-1, No Enhancer
1% PGE-1, 10% Lauryl Pivalate
1% PGE-1, 10% Tetradecyl Pivalate
1% PGE-1, 10% N-Dodecyl Pivalamide
1% PGE-1, 10% N-Decyl Pivalamide
1% PGE-1, 10% t-Butyl Decanoate
1% PGE-1, 10% t-Butyl Laurate
1% PGE-1, 10% t-Butyl Myristoate

Figure 18


Mean ± S.E. (n=6)
Cumulative Amt of PGE-1 (%dose)
Time (h)
0
4
8
12
16
20
24
5
10
15
20
25
30
1% PGE-1, No Enhancer
1% PGE-1, 10% N-Dodecyl Pivalamide
1% PGE-1, 10% t-Butyl Laurate
1% PGE-1, 10% Lauryl Pivalate
1% PGE-1, 10% N-Decyl Pivalamide
1% PGE-1, 10% t-Butyl Myristoate
1% PGE-1, 10% Tetradecyl Pivalate
1% PGE-1, 10% t-Butyl Decanoate